Application No. 09/651,754

Docket No. 20-0139

1. (Amended)   A transceiver-processor building block for an electronic radio system multifunction slice, the building block comprising:

a plurality of bi-directional transceivers;

a processor coupled to the transceivers;

a local RF control bus inaccessible directly from outside the multifunction slice and coupled between the processor and the transceivers;

a network bus coupled to the processor; and

a network bus connector coupled to the network bus to provide direct accessibility to the network bus from outside the multifunction slice.

14. (Amended)   An electronic radio system multifunction slice for supporting a predetermined number of communication threads, the multifunction slice comprising:

an RF aperture interface;

a plurality of bi-directional transceivers coupled to the RF aperture interface;

a processor coupled to the transceivers;

a local RF control bus inaccessible directly from outside the multifunction slice and coupled between the processor, the transceivers, and the RF aperture interface;

a network bus coupled to the processor;

a network bus connector coupled to the network bus to provide direct accessibility to the network bus from outside the multifunction slice; and

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a backplane interface coupled to the processor, the backplane interface providing

a backplane output and a backplane input.

19. (Amended)   A method for operating a transceiver-processor building

block in an electronic radio system multifunction slice, the method comprising:

providing a plurality of bi-directional transceivers coupled to a processor;

communicating unencrypted data to the processor over a network bus coupled to

the processor, the network bus coupled to a network bus connector providing direct

accessibility to the network bus from outside the multifunction slice;

processing the unencrypted data to form control data; and

communicating the control data to the transceivers over a local RF control bus

between the processor and the transceivers, the local RF control bus inaccessible directly

from outside the multifunction slice.